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INT.CL.

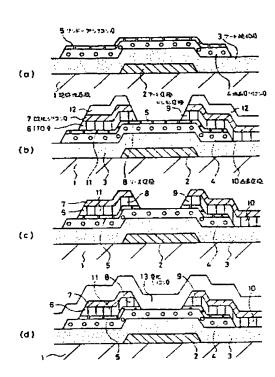
G02F 1/133 H01L 27/12 H01L 29/78

TITLE

PRODUCTION OF ACTIVE MATRIX

SUBSTRATE

PHN DOSSIER



ABSTRACT:

PURPOSE: To prevent the deterioration of image quality by forming a silicon oxide layer on an ITO layer at the same pattern as the pattern of the ITO layer so that the ITO layer is prevented from being reduced even if a silicon nitride layer is used as a protective film.

CONSTITUTION: The ITO layer 6 is formed by a vacuum vapor deposition method and further, the silicon oxide layer 7 is formed by a plasma CVD method. A photoresist 12 is coated on the silicon oxide layer 7 and is developed to the shapes of source electrodes 8, drain electrodes 9, picture element electrodes 10 and source wirings 11. The silicon oxide layer is then etched with the photoresist 12 as a mask by a soln. of hydrofluoric acid: ammonium fluoride=1:6 and in succession, the ITO layer 6 is etched by a ferric chloride soln. Since the silicon oxide layer 7 is formed at the same pattern as the pattern of the ITO layer 6 on the ITO layer 6, the exposure of the ITO layer 6 to a reducing gaseous atmosphere of ammonia, etc., is obviated at the time of forming the silicon nitride layer 13. The high-quality image is thereby obtd.

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